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IN THE CLAIMS

DEC 01 2006

1. (Currently amended) A tuning system for receiving a radio frequency input signal included in a frequency range the range having a plurality of non-overlapping bands, a maximum frequency and a minimum frequency, the tuning system comprising a voltage-controlled oscillator controlled by an analog signal and a first binary signal and being characterized in that, wherein the analog signal is inputted to a window comparator, said comparator having a low threshold which is indicative for the minimum frequency and a high threshold which is indicative for the maximum frequency, wherein the window comparator generates a signal that is inputted to a controller, for generating the first binary signal to digitally control an output frequency of the voltage-controlled oscillator, and wherein the controller further generates a second binary signal that is inputted to a frequency divider for determining a division factor of a periodical signal generated by the voltage-controlled oscillator.

2. (Canceled)

3. (Canceled)

4. (Currently amended) A tuning system as claimed in claim 12, wherein the controller further comprises a local memory for storing a binary representation of the frequency range and of each of the bands included in the frequency range.

5. (Currently amended) A tuning system as claimed in claim 13 further comprising a phase-locked loop, the phase-locked loop including a phase detector coupled to the frequency divider, the phase detector generating an error signal that is proportional to a phase difference between a phase of a reference periodical signal and a phase of a signal generated by the frequency divider, the error signal being inputted to a compound bloc comprising a charge pump coupled to a loop filter, the compound bloc generating the analog signal.

6. (Previously presented) A tuning system as claim in claim 1, wherein the window comparator comprises a first differential comparator and a second differential comparator, the first differential comparator generating a first signal having a first binary value whenever the analog signal is bigger than the high threshold, the second differential comparator generating a second signal having a second binary value whenever the analog signal is smaller than the low threshold.
7. (Previously presented) A tuning system as claimed in claim 1, wherein the voltage-controlled oscillator comprises a plurality of capacitors coupled respectively to a plurality of switches, a state of said switches being controlled by the first digital signal.
8. (Canceled)
9. (Canceled)